

REMARKS

This application has been carefully reviewed in light of the final Office Action dated June 19, 2007. Claims 39 to 62 are pending in the application, of which Claims 51 to 62 are withdrawn from consideration. Claims 39 and 43 to 45 are the independent claims under consideration. Reconsideration and further examination are respectfully requested.

Claims 39 to 50 were rejected under 35 U.S.C. § 101 for lack of patentable utility. In a related rejection, Claims 39 to 50 were rejected under 35 U.S.C. § 112, first paragraph, on the ground that one skilled in the art would not know how to use the invention. These rejections are respectfully traversed.

According to the Office Action, the instant specification does not state whether clone dw665_4 has an inhibitory effect on BMP-2 or BMP-4. However, based on the disclosure that clone dw665_4 binds to BMP-2 and BMP-4 (see page 228), and the fact that clone dw665_4 has high similarity to chordin (see page 227), which is a well-known inhibitor of BMP proteins, Applicants respectfully submit that one skilled in the art would have understood that clone dw665_4 would have an inhibitory effect on BMPs.

Furthermore, the specification states the clone dw665_4 may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy, and localized neuropathies. See page 277, lines 13 to 53.

It has been held that a post-filing reference can be used to prove that the disclosure was in fact enabling as filed. See *In re Brana*, 51 F.3d 1560, 1567, n.19, 34 U.S.P.Q.2d 1436, 1444 n.19 (Fed. Cir. 1995). A post-filing reference can be used to refute any doubts about an asserted utility. See *id.*

Here, Applicants respectfully submit that the asserted utility is substantiated by the *Sakuta* and *Marthura* articles, which were cited in the Information Disclosure Statement dated March 29, 2007.

In particular, Applicants respectfully submit that their asserted utility is consistent with the fact that clone dw665_4 is now known as ventroptin, which antagonizes the function of BMP-4. See *Sakuta*, Abstract.

It is further submitted that the asserted utility is substantiated by *Mathura*, which discloses that BMP-4 inhibits proliferation of cultured retinal pigmented epithelium (RPE) cells and may serve as a negative growth regulator in the retina and RPE that are down-regulated by injury, to allow tissue repair. See *Mathura*, Discussion, pages 597 to 599, and Fig. 10. *Mathura* also discloses that the modulation of BMP-4 may provide a means to control the exaggerated wound repair that occurs in proliferative retinopathies. See *id.*

In view of the foregoing, Applicants submit that the present invention is supported by a specific and substantial asserted utility and/or a well-established utility, and reconsideration and withdrawal of the § 101 and § 112, first paragraph, rejections are respectfully requested.

The application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

Applicants' undersigned attorney may be reached in our Costa Mesa, California, office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,



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